

materials are available from the sources listed below.

(1) *ASTM International material*. The following standards are available from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428–2959, (877) 909–ASTM, or <http://www.astm.org>:

(i) ASTM D5500–98 (Reapproved 2008), Standard Test Method for Vehicle Evaluation of Unleaded Automotive Spark-Ignition Engine Fuel for Intake Valve Deposit Formation, approved July 1, 2008.

(ii) ASTM D5598–01 (Reapproved 2012), Standard Test Method for Evaluating Unleaded Automotive Spark-Ignition Engine Fuel for Electronic Port Fuel Injector Fouling, approved November 1, 2012.

(2) [Reserved]

[79 FR 23649, Apr. 28, 2014]

§ 80.166 Carburetor deposit control performance test and test fuel guidelines.

EPA will use the guidelines in this section to evaluate the adequacy of carburetor deposit control test data, used to support the minimum concentration recommended for detergents used in leaded gasoline pursuant to § 80.161(b)(1)(ii)(B).

(a) *Carburetor Deposit Control Test Procedure and Performance Standard Guidelines*. For demonstration of carburetor deposit control performance, any generally accepted vehicle, engine, or bench test procedure and associated performance standard for carburetor deposit control will be considered adequate. Port and throttle body fuel injector deposit control test data will also be considered to be adequate demonstration of an additive's ability to control carburetor deposits. Examples of acceptable test procedures for demonstration of carburetor deposit control, in addition to the fuel injector test procedure listed in § 80.165(a), are contained in the following references:

(1) “Test Method for Evaluating Port Fuel Injector (PFI) Deposits in Vehicle Engines”, March 1, 1991, Section 2257, Title 13, California Code of Regulations.

(2) “A Vehicle Test Technique for Studying Port Fuel Injector Deposits—A Coordinating Research Council Pro-

gram”, Robert Tupa et al., SAE Technical paper No. 890213, 1989.

(3) “The Effects of Fuel Composition and Additives on Multiport Fuel Injector Deposits”, Jack Benson et al., SAE Technical Paper Series No. 861533, 1986.

(4) “Injector Deposits—The Tip of Intake System Deposit Problems”, Brian Taneguchi, et al., SAE Technical Paper Series No. 861534, 1986.

(5) “Fuel Injector, Intake Valve, and Carburetor Detergency Performance of Gasoline Additives”, C.H. Jewitt et al., SAE Technical Paper No. 872114, 1987.

(6) “Carburetor Cleanliness Test Procedure, State-of-the-Art Summary, Report: 1973–1981”, Coordinating Research Council, CRC Report No. 529, Coordinating Research Council Inc. (CRC), 219 perimeter Center Parking, Atlanta, Georgia, 30346.

(b) *Carburetor Deposit Control Test Fuel Guidelines*. (1) The gasoline used in the tests described in paragraph (a) of this section must contain the detergent-active components of the subject detergent additive package in an amount which corresponds to the minimum recommended concentration recorded in the respective detergent registration, or less than this amount.

(2) The test fuel must not contain any detergent-active components other than those recorded in the subject detergent certification.

(3) The composition of the test fuel used in carburetor deposit control testing, conducted to support the claimed effectiveness of detergents used in leaded gasoline, should be reasonably typical of in-use gasoline in its tendency to form carburetor deposits (or more severe than typical in-use fuels) as defined by the olefin and sulfur content. A test fuel conforming to these compositional guidelines may be sampled directly from finished gasolines or may be blended to specification using typical refinery blend stocks. Test data using leaded fuels is preferred for this purpose, but data collected using unleaded fuels may also be acceptable provided that some correlation with additive performance in leaded fuels is available.

[61 FR 35372, July 5, 1996]